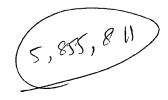
L1 L2	(FILE 'USPAT' ENTERED AT 11:45:24 ON 28 JUN 1999) 47010 S (ETCH? OR REMOVE? OR CLEAN?) AND WAFER? 10705 S (ETCH? OR REMOVE? OR CLEAN?) AND (ORGANIC(P)CONTAMINANT?
OR L3 L4 L5	1988 S L1 AND L2 8 S L3 AND (252/79.3/CCLS) 173 S L3 AND (WATER AND OZONE AND CARBOXYLIC(1W)ACID OR CITRIC
(1W L6 L7	4 S L5 AND (252/79.3/CCLS) 42 S L3 AND (134/2/CCLS)



An etching solution for III/V semiconductor material, such as gallium arsenide, consists essentially of: 20 to 90 vol. % of phosphoric acid solution; 15 to 80 vol. % of hydrogen peroxide solution; 0 to 60 vol. % of water; and an amount of fluorine ion effective to provide at least 0.01 mole of fluorine ion per liter of solution, said solution being effective to etch without evolving a gaseous product.

TITLE:

Wet chemical etching of III/V semiconductor material without gas evolution

\$ 5,640,703 - 470 + Carbinglin Aid + Considir option

(5,837,662) => (itri 20, + HF + AIK. + which

5,776,351) -> 400+ 03

(5,776,351) -> 400+ 03

(5,776,381) -> 400+ 03

(5,776,381) -> 400+ 03

(5,776,381) -> 400+ 03





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(FILE 'USPAT' ENTERED AT 09:14:36 ON 28 JUN 1999)
          5787 S (REMOVE? OR CLEAN?) AND (ORGANIC(1W)CONTAMINANTS OR PHOT
L1
           159 S L1 AND (WATER AND OZONE AND ACETIC(1W)ACID OR CITRIC(1W)
O-R
L2
ACI
              5 S L2 AND (252/79.3/CCLS)
             0 S L2 AND (438/745/CCLS AND 134/CLAS )
L3
            20 S L2 AND (438/745/CCLS OR 134/CLAS )
L4
           367 S L1 AND (WATER AND OZONE OR 03 AND CARBOXYLIC(1W)ACID OR
L5
Г6
            93 S L6 AND (CITRIC(1W)ACID OR ACETIC(1W)ACID AND HCL OR HYDR
PHO
L7
OCH
=> s 16 and (liquid(1w)mist or acid(1w)mist)
        619139 LIQUID
         16359 MIST
           509 LIQUID(1W)MIST
        460199 ACID
         16359 MIST
           359 ACID(1W)MIST
             2 L6 AND (LIQUID(1W)MIST OR ACID(1W)MIST)
 L8
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```
=> s (etch? or remove? or clean?) and (organic(p)contaminant? or
photo(1w)resist)
        102958 ETCH?
       1115441 REMOVE?
        313664 CLEAN?
        371922 ORGANIC
         66715 CONTAMINANT?
          6862 ORGANIC(P)CONTAMINANT?
         74524 PHOTO
        107551 RESIST
          10705 (ETCH? OR REMOVE? OR CLEAN?) AND (ORGANIC(P)CONTAMINANT? OR
           4515 PHOTO(1W)RESIST
L1
 PH
                OTO (1W) RESIST)
 => s 11 and (water and ozone and hcl or hf or co2 or hno3)
         751508 WATER
          18647 OZONE
          95171 HCL
          28745 HF
           1993 CO2
            145 HNO3
            895 L1 AND (WATER AND OZONE AND HCL OR HF OR CO2 OR HNO3)
 L2
 \Rightarrow s 12 and (134/clas or 438/clas)
           24273 134/CLAS
           29496 438/CLAS
             327 L2 AND (134/CLAS OR 438/CLAS)
  L3
 => s 12 and (carboxylic(lw)acid or phosphoric(lw)acid or acetic(lw)acid)
          126471 CARBOXYLIC
          460199 ACID
           94248 CARBOXYLIC(1W)ACID
           82568 PHOSPHORIC
          460199 ACID
           67046 PHOSPHORIC(1W)ACID
          135323 ACETIC
          460199 ACID
             269 L2 AND (CARBOXYLIC(1W)ACID OR PHOSPHORIC(1W)ACID OR ACETIC(
          119969 ACETIC(1W)ACID
  L4
  1W)
```